WEST Search History

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DATE: Monday, April 05, 2004

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	DB=PGPB, US	PT, USOC, EPAB, JPAB, DWPI;	PLUR=YES; OP=ADJ
	L5	L4 and aspart\$	21
\Box	L4	L3 with muta\$	42
\Box	L3	pyruvate carboxylase	825
	L2	L1 and pyruvate	5
	L1	hanke.in.	1351

END OF SEARCH HISTORY

First Hit

Generate Collection Print

L2: Entry 1 of 5

File: PGPB

Jan 23, 2003

DOCUMENT-IDENTIFIER: US 20030017557 Al TITLE: Gene encoding phosphoglucoisomerase

INVENTOR:

Hanke, Paul D.

Detail Description Paragraph:

[0023] In agreement with the present invention, the altered bacterial cell of the present invention is cultured in a culture medium that comprises a carbon source and a nitrogen source. The carbon source can be, for example, arabinose. cellobiose, fructose, glucose, lactose, maltose, mannose, rhamnose, raffinose sorbose, sucrose, trehalose, <u>pyruvate</u>, or succinate. The carbon source is preferably at an initial concentration of 0.1 to 10%, preferably 0.5 to 6.0% by weight. All of the carbon source can be added to the medium before the start of culturing, or it can be added step by step or continuously during culturing.

Detail Description Paragraph:

[0035] Most of the glucose catabolized in living organisms proceeds through glycolysis resulting in the formation of <u>pyruvate</u>. The pentose phosphate pathway, also called the hexose monophosphate shunt, is an alternative route for glucose catabolism. The pentose phosphate pathway produces NADPH and under lysine fermentation conditions is more active. Ishino, S. et al., J. Gen. Appl. Microbiol. 3-:157-165 (1991).

Detail Description Paragraph:

[0037] In a preferred embodiment, the present invention further provides a method of producing L-amino acids by culturing an altered bacterial cell with an increased amount of malic enzyme relative to an unaltered cell. Malic enzyme catalyzes the reaction of malate with NADP.sup.+ to produce <u>pyruvate</u>, carbon dioxide, NADPH and H.sup.+.

Detail Description Paragraph:

[0039] Both glycolysis and the pentose phosphate pathway compete for glucose. In the present invention, an altered bacterial cell can be one in which a decrease or blockage of the carbon flux though glycolysis results in an increase in the carbon flux though the oxidative branch of the pentose phosphate pathway. As used in the present invention, an altered bacterial cell can be one in which a decrease in carbon flux through glycolysis is achieved through decreasing the amount of one or more enzyme(s) involved in glycolysis. Preferred enzymes are 6-phosphoglucose isomerase, fructose diphosphate aldolase, D-glyceraldehyde phosphate dehydrogenase, phophoglycerate kinase, phosphoglycerate mutase, endolase or pyruvate kinase. A preferred enzyme is 6-phosphoglucose isomerase.

Clear Generate Collection Print Fwd Refs Bkwd Refs
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Search Results - Record(s) 1 through 5 of 5 returned.

1. Document ID: US 20030017557 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 5

File: PGPB

Jan 23, 2003

PGPUB-DOCUMENT-NUMBER: 20030017557

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030017557 A1

TITLE: Gene encoding phosphoglucoisomerase

PUBLICATION-DATE: January 23, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Hanke, Paul D.

Aurora

IL

US

US-CL-CURRENT: 435/106; 435/191, 435/252.3, 435/320.1, 435/69.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | ROMC | Draw. De

2. Document ID: US 20020177202 A1

L2: Entry 2 of 5

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177202

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177202 A1

TITLE: Feedback-resistant pyruvate carboxylase gene from corynebacterium

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Hanke, Paul D.

Aurora

ΙL

US

US-CL-CURRENT: 435/189; 435/193, 435/320.1, 435/325, 435/69.1, 536/23.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

3. Document ID: US 6680190 B2

L2: Entry 3 of 5

File: USPT

Jan 20, 2004

Oct 15, 2002

US-PAT-NO: 6680190

DOCUMENT-IDENTIFIER: US 6680190 B2

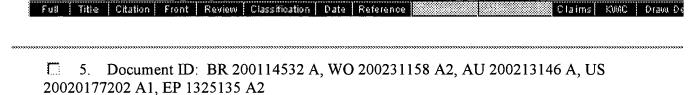
TITLE: Gene encoding phosphoglucoisomerase

Full Title Citation Front Review Classification Date Reference 4. Document ID: US 6465238 B1 L2: Entry 4 of 5

US-PAT-NO: 6465238

DOCUMENT-IDENTIFIER: US 6465238 B1

TITLE: Gene encoding phosphoglucoisomerase



L2: Entry 5 of 5

File: DWPI

Dec 30, 2003

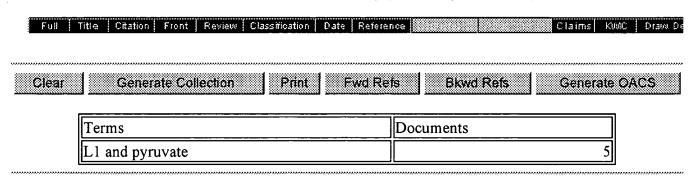
DERWENT-ACC-NO: 2002-463267

DERWENT-WEEK: 200409

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TITLE: Novel mutated, feedback resistant pyruvate carboxylase enzyme polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine, L-glycine, L-glutamic

acid, L-proline and L-methionine and L-isoleucine



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Previous Page Next Page Go to Doc#

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Search Results - Record(s) 1 through 10 of 21 returned.

1. Document ID: US 20030228567 A1

Using default format because multiple data bases are involved.

L5: Entry 1 of 21

File: PGPB

Dec 11, 2003

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030228567

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030228567 A1

TITLE: Compostions and methods for modeling Saccharomyces cerevisiae metabolism

PUBLICATION-DATE: December 11, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47 Famili, Imandokht San Diego CA US Forster, Jochen Copenhagen ΗI DK Honolulu Fu, Pengcheng CA US Nielsen, Jens B. Charlottenlund DK Palsson, Bernhard O. La Jolla US

US-CL-CURRENT: 435/4; 435/254.21, 435/6, 702/19

	Full	Title	Citation Front	Review Classification		Sequences	Attachments	Claims	KWWC	Draw De
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		2.	Document ID:	US 20030166285	A 1					

File: PGPB

PGPUB-DOCUMENT-NUMBER: 20030166285 PGPUB-FILING-TYPE: new

L5: Entry 2 of 21

DOCUMENT-IDENTIFIER: US 20030166285 A1

TITLE: Methods and compositions for genetically modifying primate bone marrow cells

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Valerio, Domenico Leiden NL Van Beusechem, Victor Willem Amsterdam NL

US-CL-CURRENT: 435/456; 435/372

Full Title Citation Front	Review Classification	Date Reference	Sequences Attachments	Claims K0	MC Drawe De
					

3. Document ID: US 20030087381 A1

L5: Entry 3 of 21

File: PGPB

May 8, 2003

PGPUB-DOCUMENT-NUMBER: 20030087381

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030087381 A1

TITLE: Metabolically engineered organisms for enhanced production of oxaloacetate-

derived biochemicals

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Gokarn, Ravi R. Plymouth MN US Eiteman, Mark A. Athens GA US

Altman, Elliot Athens GA US

US-CL-CURRENT: 435/69.1; 435/193, 435/252.3, 435/252.33, 435/320.1, 536/23.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWC Draw Da

4. Document ID: US 20030082238 A1

L5: Entry 4 of 21 File: PGPB May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030082238

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030082238 A1

TITLE: Matrices for drug delivery and methods for making and using the same

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Babich, John W. North Scituate MA US
Zubieta, Jon Syracuse NY US
Bonavia, Grant Kensington MD US

US-CL-CURRENT: 424/491; 424/130.1, 424/94.1

	Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments Claims	Kumo	Draw, De
•			-	•								

5. Document ID: US 20030027305 A1

L5: Entry 5 of 21

File: PGPB

Feb 6, 2003

PGPUB-DOCUMENT-NUMBER: 20030027305

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030027305 A1

TITLE: Pyruvate carboxylase from Corynebacterium glutamicum

PUBLICATION-DATE: February 6, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Sinskey, Anthony J. Boston MA US Lessard, Philip A. Framingham MA US

Willis, Laura B. Cambridge MA US

US-CL-CURRENT: 435/189; 435/115, 435/252.3, 435/320.1, 435/69.1, 536/23.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw. De

6. Document ID: US 20020177202 A1

L5: Entry 6 of 21 File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177202

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177202 A1

TITLE: Feedback-resistant pyruvate carboxylase gene from corynebacterium

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY RULE-47

Hanke, Paul D. Aurora IL US

US-CL-CURRENT: 435/189; 435/193, 435/320.1, 435/325, 435/69.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | 10MC | Draw De

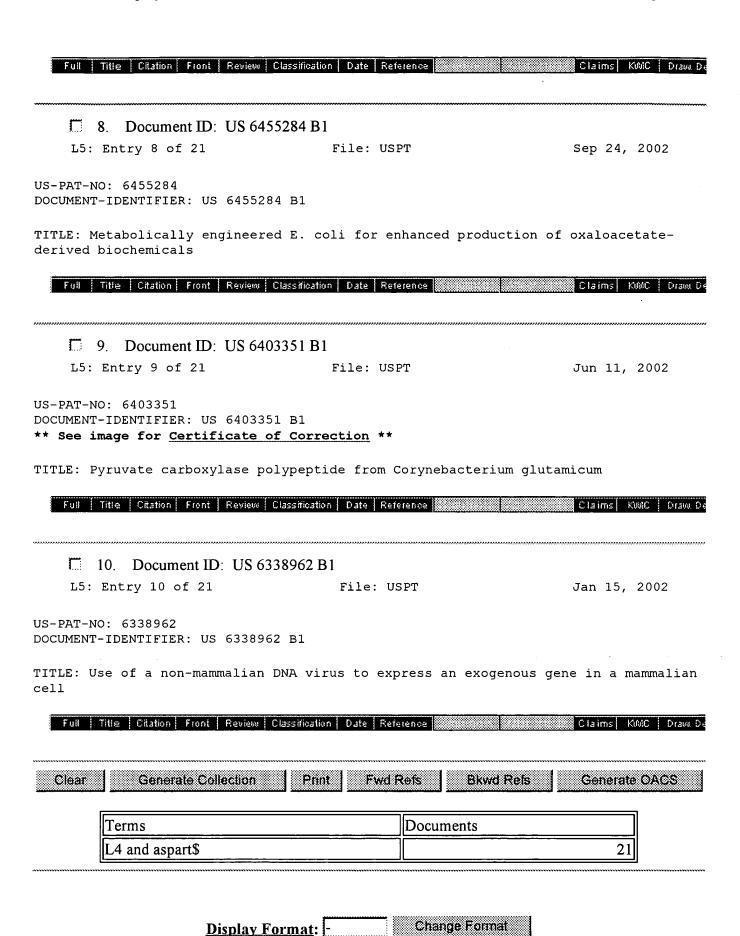
7. Document ID: US 6472212 B1

L5: Entry 7 of 21 File: USPT Oct 29, 2002

US-PAT-NO: 6472212

DOCUMENT-IDENTIFIER: US 6472212 B1

TITLE: Methods and compositions for genetically modifying primate bone marrow cells



Clear Generate Collection Print Fwd Refs Bkwd Refs
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Search Results - Record(s) 11 through 20 of 21 returned.

11. Document ID: US 6338953 B1

Using default format because multiple data bases are involved.

L5: Entry 11 of 21

File: USPT

Jan 15, 2002

US-PAT-NO: 6338953

DOCUMENT-IDENTIFIER: US 6338953 B1

TITLE: Expression of an exogenous gene in a mammalian cell by use of a non-

mammalian DNA virus having an altered coat protein

DATE-ISSUED: January 15, 2002

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Boyce; Frederick M.

Belmont

MA

Barsoum; James G.

Lexington

MA

US-CL-CURRENT: 435/69.7; 435/252.3, 435/320.1, 435/325, 435/69.1, 514/12, 536/23.2, 536/23.5

Full Title Citation Front Review	· Classification Date Reference	Claims KMC Draw De
		······
12. Document ID: US 6		
L5: Entry 12 of 21	File: USPT	Aug 28, 2001

US-PAT-NO: 6281009

DOCUMENT-IDENTIFIER: US 6281009 B1

TITLE: Use of a non-mammalian DNA virus to express an exogenous gene in a mammalian

cell

Full Title Citation Front	Review Classification Date Reference	Claims KMC Draw De

13. Document ID: US 6238914 B1

L5: Entry 13 of 21

File: USPT

May 29, 2001

US-PAT-NO: 6238914

DOCUMENT-IDENTIFIER: US 6238914 B1

h e b b cg b cc e

TITLE: Use of a non-mammalian DNA virus to express an exogenous gene in a mammalian cell

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | Claims | KWC | Draw Date | Claims | Claims | KWC | Draw Date | Claims | Claims | KWC | Draw Date | Claims | Claims | KWC | Draw Date | Claims | Claims | KWC | Draw Date | Claims | Claim

File: USPT

Feb 20, 2001

US-PAT-NO: 6190887

DOCUMENT-IDENTIFIER: US 6190887 B1

L5: Entry 14 of 21

TITLE: Expression of an exogenous gene in a mammalian cell by use of a non-

mammalian DNA virus having an altered coat protein

Full Title Citation Front Review Classification Date Reference Claims RMC Draw De Claims

US-PAT-NO: 6183993

DOCUMENT-IDENTIFIER: US 6183993 B1

TITLE: Complement-resistant non-mammalian DNA viruses and uses thereof

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | Claims | RVMC | Drawn De |

16. Document ID: US 6171833 B1

L5: Entry 16 of 21 | File: USPT | Jan 9, 2001

US-PAT-NO: 6171833

DOCUMENT-IDENTIFIER: US 6171833 B1

TITLE: Pyruvate carboxylase from corynebacterium glutamicum

Full Title Citation Front Review Classification Date Reference Claims KWIC Draw De

17. Document ID: US 6165500 A

L5: Entry 17 of 21 File: USPT Dec 26, 2000

US-PAT-NO: 6165500

DOCUMENT-IDENTIFIER: US 6165500 A

TITLE: Preparation for the application of agents in mini-droplets

Full Title Citation Front Review Classification Date Reference Claims KMC Draw De

18. Document ID: US 5871986 A

L5: Entry 18 of 21

File: USPT

Feb 16, 1999

US-PAT-NO: 5871986

DOCUMENT-IDENTIFIER: US 5871986 A

TITLE: Use of a baculovirus to express and exogenous gene in a mammalian cell

Full Title Citation Front Review Classification Date Reference Claims KWIC Draw Do

15. Entry 10 of 21

L5: Entry 19 of 21

File: USPT

Mar 24, 1998

US-PAT-NO: 5731182

DOCUMENT-IDENTIFIER: US 5731182 A

TITLE: Non-mammalian DNA virus to express an exogenous gene in a mammalian cell

20. Document ID: BR 200114532 A, WO 200231158 A2, AU 200213146 A, US

20020177202 A1, EP 1325135 A2

Full Title Citation Front Review Classification Date Reference

L5: Entry 20 of 21

File: DWPI

Dec 30, 2003

Claims KOMC Draw De

DERWENT-ACC-NO: 2002-463267

DERWENT-WEEK: 200409

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TITLE: Novel <u>mutated</u>, feedback resistant <u>pyruvate carboxylase</u> enzyme polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine, L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine

Full Title Citation Front Review Classification Date Reference Claims KWC Draws De Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

Terms Documents

L4 and aspart\$

21

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Previous Page Next Page Go to Doc#

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Clear Generate Collection Print Fwd Refs Bkwd Refs
Generate OACS

Search Results - Record(s) 21 through 21 of 21 returned.

21. Document ID: PH 1199448842 B1, WO 9506114 A1, AU 9480991 A, JP 07111890 A, JP 08070860 A, CZ 9600524 A3, EP 723011 A1, SK 9600204 A3, BR 9407625 A, AU 682547 B, CN 1133615 A, EP 723011 A4, US 5876983 A, US 5919694 A, JP 3013711 B2, RU 2133772 C1, MX 195842 B, HU 219600 B, CZ 289051 B6, EP 723011 B1, DE 69430919 E, KR 337959 B, SK 283369 B6

Using default format because multiple data bases are involved.

L5: Entry 21 of 21

File: DWPI

Apr 16, 2002

DERWENT-ACC-NO: 1995-106843

DERWENT-WEEK: 200382

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TITLE: Variant of phospho-enol pyruvate carboxylase - not substantially inhibited

by aspartic acid, is used for efficient production of amino acids

INVENTOR: IZUI, K; MATSUI, H; SUGIMOTO, M; SUZUKI, T; HIROSHI, M; MASAKAZU, S; TOMOKO, S; TOYAMA, T; MATSUI, H H

PRIORITY-DATA: 1994JP-0153876 (July 5, 1994), 1993JP-0209775 (August 24, 1993), 1993JP-0209776 (August 24, 1993)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
PH 1199448842 B1	April 16, 2002		000	C12N015/00
WO 9506114 A1	March 2, 1995	J	077	C12N009/88
AU 9480991 A	March 21, 1995		000	C12N009/88
JP 07111890 A	May 2, 1995		016	C12N009/00
JP 08070860 A	March 19, 1996		026	C12N009/00
CZ 9600524 A3	June 12, 1996		000	C12N009/88
EP 723011 A1	July 24, 1996	E	050	C12N009/88
SK 9600204 A3	November 6, 1996		000	C12N009/88
BR 9407625 A	January 21, 1997		000	C12N009/88
AU 682547 B	October 9, 1997		000	C12N009/88
CN 1133615 A	October 16, 1996		000	C12N009/88
EP 723011 A4	January 1, 1997		000	C12N009/88
US 5876983 A	March 2, 1999		000	C12P013/04
<u>US 5919694 A</u>	July 6, 1999		000	C07H021/04
JP 3013711 B2	February 28, 2000		016	C12N009/00
RU 2133772 C1	July 27, 1999		000	C12N009/88
MX 195842 B	April 4, 2000		000	C07H021/004
<u>HU 219600 B</u>	May 28, 2001		000	C12N009/88

CZ 289051 B6	October 17, 2001		000	C12N009/88
EP 723011 B1	July 3, 2002	E	000	C12N009/88
DE 69430919 E	August 8, 2002		000	C12N009/88
KR 337959 B	November 23, 2002		000	C12N009/88
SK 283369 B6	June 3, 2003		000	C12N009/88

C1 , MX 195842 B INT-CL (IPC): C07H 21/004; C07H 21/04; C12N 1/020; C12N 1/20; C12N 1/21; C12N 9/00; C12N 9/18; C12N 9/88; C12N 15/00; C12N 15/03; C12N 15/09; C12N 15/11; C12N 15/52; C12P 13/04; C12P 13/06; C12P 13/08; C12P 13/10; C12P 13/12; C12P 13/14; C12P 13/24; C12N 1/21; C12R 1/01; C12N 1/21; C12R 1/185; C12N 9/00; C12R 1/01; C12N 9/00; C12R 1/185; C12P 13/06; C12R 1/185; C12P 13/06; C12R 1/01; C12P 13/08; C12R 1/185; C12P 13/08; C12R 1/01; C12P 13/10; C12R 1/185; C12P 13/10; C12R 1/185; C12P 13/10; C12R 1/185; C12P 13/14; C12R 1/185; C12N 9/00; C12R 1/01; C12N 1/21; C12R 1/185; C12N 1/21; C12R 1/01; C12N 15/09; C12R 1/185; C12P 13/06; C12R 1/185; C12P 13/08; C12R 1/01; C12N 9/00; C12R 1/185; C12P 13/08; C12R 1/01; C12N 15/09; C12R 1/185

Full	Title Citation	Front	Review	Classification	Date	Reference			Claims	KWC	Drawi De
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 NEWS 12
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                  No connect hour charges in WPIFV until May 1, 2004
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 NEWS EXPRESS
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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      enzyme polypeptide, useful for producing amino_acids e.g. L-lysine,
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      L-isoleucine;
         plasmid-mediated recombinant enzyme gene transfer and expression in
         Corynebacterium sp.
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LA
      English
      WPĬ: 2002-463267 [49]
os
=> dis his
     (FILE 'HOME' ENTERED AT 11:49:36 ON 05 APR 2004)
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FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS,

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NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 11:49:49 ON 05 APR 2004
            7857 S HANKE, ?/AU
L2
                3 S L1 AND PYRUVATE CARBOXYLASE
£3
                1 DUP REM L2 (2 DUPLICATES REMOVED)
=> log h
                                                       SINCE FILE
                                                                         TOTAL
COST IN U.S. DOLLARS
                                                             ENTRY
                                                                       SESSION
FULL ESTIMATED COST
                                                             17.82
                                                                         18.03
 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:50:49 ON 05 APR 2004
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LOGINID:SSSPTA1800EXS
PASSWORD:
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FILE 'BIOTECHNO' ENTERED AT 11:56:41 ON 05 APR 2004
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                                                       SINCE FILE
                                                                         TOTAL
COST IN U.S. DOLLARS
                                                             ENTRY
                                                                       SESSION
                                                             17.82
                                                                         18.03
FULL ESTIMATED COST
=> s pyruvate carboxylase
           9293 PYRUVATE CARBOXYLASE
L4
=> s 14 (5a)(sequence or gene)
   6 FILES SEARCHED...
  10 FILES SEARCHED..
            790 L4 (5A) (SEQUENCE OR GENE)
=> s 15 (5a) muta?
             49 L5 (5A) MUTA?
=> s 14 (5a)(feedback or resistant or inhibit?)
   9 FILES SEARCHED.
             530 L4 (5A)(FEEDBACK OR RESISTANT OR INHIBIT?)
=> s 17 (5a)(aspart?)
              94 L7 (5A) (ASPART?)
=> s 16 and 18
               3 L6 AND L8
L9
=> dup rem 19
PROCESSING COMPLETED FOR L9
                1 DUP REM L9 (2 DUPLICATES REMOVED)
L10
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=> d
L10
      ANSWER 1 OF 1 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
AN
      2002-16323 BIOTECHDS
TI
      Novel mutated, feedback resistant pyruvate carboxylase enzyme
      polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine,
      L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine;
          plasmid-mediated recombinant enzyme gene transfer and expression in
          Corynebacterium sp.
ΑU
      HANKE P D
PA
      ARCHER-DANIELS MIDLAND CO
      WO 2002031158 18 Apr 2002
PT
ΑI
      WO 2000-US31893 13 Oct 2000
      US 2000-239913 13 Oct 2000
PRAI
DT
      Patent
      English
ΙΑ
os
      WPĪ: 2002-463267 [49]
=> dup rem 18
PROCESSING COMPLETED FOR L8
L11
              44 DUP REM L8 (50 DUPLICATES REMOVED)
=> d 1-10
      ANSWER 1 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
L11
      2003-28643 BIOTECHDS
AN
      Novel isolated coryneform bacteria citE gene polynucleotide which encodes
TT
      polypeptide preferably exhibiting citrate lyase E activity, useful for
      production of L-amino acids;
          recombinant enzyme protein production via plasmid expression in host
          cell useful for L-amino acid production
      FARWICK M; HUTHMACHER K; MARX A; BATHE B; PFEFFERLE W
ΑU
      FARWICK M; HUTHMACHER K; MARX A; BATHE B; PFEFFERLE W
PA
      US 2003113879 19 Jun 2003
US 2001-770688 6 Jun 2001
US 2001-770688 6 Jun 2001; US 2001-770688 6 Jun 2001
PΙ
ΑI
PRAI
DT
      Patent
      English
LA
      WPI: 2003-801299 [75]
0S
L11
      ANSWER 2 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2002-16323 BIOTECHDS
AN
TI
      Novel mutated, feedback resistant pyruvate carboxylase enzyme
      polypeptide, useful for producing amino acids e.g. L-lysine, L-threonine,
      L-glycine, L-glutamic acid, L-proline and L-methionine and L-isoleucine;
          plasmid-mediated recombinant enzyme gene transfer and expression in
          Corynebacterium sp.
      HANKE P D
AU
PA
      ARCHER-DANIELS MIDLAND CO
PΙ
      WO 2002031158 18 Apr 2002
      wo 2000-us31893 13 oct 2000
ΑI
PRAI
      US 2000-239913 13 Oct 2000
DT
      Patent
      English
LA
os
      WPĪ: 2002-463267 [49]
      ANSWER 3 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN 2002-12968 BIOTECHDS
L11
AN
      New ppsA gene of Coryneform bacteria, useful when overexpressed, for increasing fermentative production of L-amino acids, encodes a
TI
      phosphoenol pyruvate synthase;
          vector-mediated pyruvate-water-dikinase gene transfer and expression
          in Coryneform glutamicum for enzyme activity enhancement for L-lysine
          production
      MOECKEL B; MARX A; BASTUCK C; BUCHHOLZ M; PFEFFERLE W
ΑU
      DEGUSSA AG
PΑ
PΙ
      wo 2002022829 21 Mar 2002
      WO 2000-EP9456 13 Sep 2000
DE 2000-1045497 13 Sep 2000
ΑI
PRAI
DT
      Patent
      English
lΑ
      WPI: 2002-362348 [39]
OS
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L11
       ANSWER 4 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN
       2002-12574 BIOTECHDS
      New atr43 gene of coryneform bacteria, useful when suppressed for increasing fermentative production of L-amino acids, encodes an ABC
TI
       transporter protein;
          vector expression in host cell for recombinant protein, fermentation,
          mutagenesis useful for L-lysine, medicine, food, DNA array and biochip
ΑU
       FARWICK M; HUTHMACHER K; PFEFFERLE W
PA
       DEGUSSA AG
PΙ
      WO 2002022814 21 Mar 2002
      WO 2000-EP8650 15 Sep 2000
ΑI
PRAI
      DE 2001-1023070 11 May 2001
DT
      Patent
      English
LA
os
      WPĪ: 2002-339870 [37]
L11
      ANSWER 5 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2002-12659 BIOTECHDS
ΑN
ΤI
      New ccsB gene of coryneform bacteria, useful when overexpressed for
       increasing fermentative production of L-amino acids, encodes a cytochrome
       c synthesis protein;
          vector-mediated gene transfer and expression in host cell for strain
          improvement and L-amino acid preparation
ΑU
       FARWICK M; HUTHMACHER K; PFEFFERLE W; BATHE B; HERMANN T
PA
      DEGUSSA AG
      WO 2002022672 21 Mar 2002
WO 2000-EP9457 14 Sep 2000
PT
ΑI
      DE 2000-1045487 14 Sep 2000
PRAI
      Patent
DT
      English
LA
      WPI: 2002-329948 [36]
os
      ANSWER 6 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
ΑN
      2002-12658 BIOTECHDS
      New pstC2 gene of coryneform bacteria, useful when suppressed for
TI
       increasing fermentative production of L-amino acids, encodes a
      membrane-bound phosphate transporter protein;
          vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation
       FARWICK M; HUTHMACHER K; PFEFFERLE W; BREHME J
ΑU
      DEGUSSA AG
PΑ
      WO 2002022671 21 Mar 2002
PΙ
      WO 2000-EP9455 14 Sep 2000
AΙ
PRAI
      DE 2000-1045486 14 Sep 2000
DT
      Patent
LA
      English
      WPĪ: 2002-329947 [36]
os
L11
      ANSWER 7 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
      2002-12657 BIOTECHDS
ΑN
      New sugA gene of coryneform bacteria, useful when suppressed for increasing fermentative production of L-amino acids, encodes a sugar
TI
       transporter protein;
          vector-mediated gene transfer and expression in host cell for strain
          improvement and L-amino acid preparation
       FARWICK M; HUTHMACHER K; PFEFFERLE W; HERMANN T; MARX A
ΑU
PA
      DEGUSSA AG
      WO 2002022669 21 Mar 2002
PΙ
      WO 2000-EP9164 14 Sep 2000
ΑI
PRAI
      DE 2001-1008839 23 Feb 2001
DT
      Patent
LA
      English
      WPĬ: 2002-329946 [36]
os
L11
      ANSWER 8 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI ON STN
AN
      2002-12656 BIOTECHDS
      New gorA gene of coryneform bacteria, useful when suppressed for increasing fermentative production of L-amino acids, encodes a
TI
      glutathione reductase;
          vector-mediated gene transfer and expression in host cell for strain improvement and L-amino acid preparation
       FARWICK M; HUTHMACHER K; PFEFFERLE W; MARX A
      DEGUSSA AG
PA
ΡI
      WO 2002022666 21 Mar 2002
      wo 2000-EP9314 12 Sep 2000
AΤ
PRAI
      DE 2001-1009023 24 Feb 2001
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Patent
DT
      English
I A
os
      WPI: 2002-329945 [36]
      ANSWER 9 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2002-13089 BIOTECHDS
AN
      New Atr61 gene of Coryneform bacteria, useful when overexpressed, for
ŢΙ
      increasing fermentative production of L-amino acids, encodes an ABC
      transporter protein;
         vector-mediated gene transfer and expression in host cell for strain
         improvement and L-lysine preparation
      FARWICK M; HUTHMACHER K; PFEFFERLE W
ΑU
PA
      DEGUSSA AG
      WO 2002022633 21 Mar 2002
WO 2000-EP10522 15 Sep 2000
PI
ΑI
      DE 2000-1045579 15 Sep 2000
PRAI
DT
      Patent
LA
      English
      WPI: 2002-362328 [39]
05
L11
      ANSWER 10 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN
      2002-13334 BIOTECHDS
      New pknD gene of Coryneform bacteria, useful when overexpressed, for increasing fermentative production of L-amino acids, encodes a protein
TI
      kinase D protein;
         plasmid pK18mobsac-pknD-XuctionL-mediated enzyme gene transfer and
         expression in Escherichia coli and Corynebacterium glutamicum for
         L-lysine production
      BATHE B; SCHROEDER I; FARWICK M; HERMANN T
ΑIJ
      DEGUSSA AG
PA
PΙ
      wo 2002022632 21 Mar 2002
      WO 2000-EP10210 12 Sep 2000
ΑI
PRAI
      DE 2001-1020094 25 Apr 2001
DT
      Patent
LA
      English
      WPI: 2002-371967 [40]
OS
=> d 11-20
      ANSWER 11 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2002-11053 BIOTECHDS
AN
      Novel lysR2 gene of coryneform bacteria encoding LysR2 protein which is a
TI
      transcription regulator, useful for fermentative production of L-lysine
      and L-valine and as a probe detecting polynucleotides encoding LysR2;
         bacterium recombinant protein production vector expression in host
         cell, for L-amino acid, L-lysine, L-valine production
      MOECKEL B; FARWICK M; HERMANN T; KREUTZER C; PFEFFERLE W
ΑU
PA
      DEGUSSA AG
      WO 2002012504 14 Feb 2002
PI
      WO 2000-EP6808 10 Aug 2000
DE 2001-1010346 3 Mar 2001
AΤ
PRAI
DT
      Patent
      English
IΑ
      WPĪ: 2002-227155 [28]
os
      ANSWER 12 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2003-06013 BIOTECHDS
ΑN
      New coryneform bacteria gene for subunit beta of RNA polymerase B, useful
TI
      when overexpressed for increasing fermentative production of amino acids,
      also its mutants;
         vector-mediated recombinant protein gene transfer and expression in
         host cell for use in food and as a food-additive
      MOECKEL B; BATHE B; HERMANN T; PFEFFERLE W; BINDER M
ΑU
PΑ
      DEGUSSA AG
PΙ
      EP 1239040 11 Sep 2002
      EP 2002-2501 2 Feb 2002
ΑI
      DE 2001-1062387 19 Dec 2001; DE 2001-1007229 16 Feb 2001
PRAI
DT
      Patent
LA
      German
      WPI: 2003-048323 [05]
OS
      ANSWER 13 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2002-14541 BIOTECHDS
ΑN
      New L-lactate dehydrogenase gene from coryneform bacteria, useful, when
TI
      overexpressed, for increasing fermentative production of L-amino acid;
```

```
vector-mediated gene transfer and expression in host cell for strain
         improvement and L-lysine preparation
      FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W
ΑU
PΑ
      DEGUSSA AG
PΙ
      EP 1186657 13 Mar 2002
      EP 2000-117811 9 Sep 2000
ΑI
PRAI
      DE 2000-1044681 9 Sep 2000
DT
      Patent
LA
      German
      WPI: 2002-282882 [33]
os
L11
      ANSWER 14 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2003-04181 BIOTECHDS
AN
      New nucleic acid encoding ribosomal protein 12 of coryneform bacteria,
TI
      useful, when overexpressed, for increasing fermentative amino acid
      synthesis;
         vector-mediated gene transfer and expression in host cell for strain
         improvement and L-lysine preparation
ΑU
      MOECKEL B; BATHE B; HANS S; KREUTZER C; HERMANN T; PFEFFERLE W; BINDER M
PA
      DEGUSSA AG
PT
      DE 10162386 29 Aug 2002
      DE 2001-1062386 19 Dec 2001
ΑI
      DE 2001-1007230 16 Feb 2001; DE 2001-1007230 16 Feb 2001
PRAI
DT
      Patent
      German
      WPI: 2002-714722 [78]
os
      ANSWER 15 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2002-17445 BIOTECHDS
AN
      New hemD and hemB genes and polypeptides of coryneform bacteria, useful,
TI
      when overexpressed, for increasing fermentative production of amino
         plasmid-mediated uroporphyrinogen-III synthase and
         delta-aminolevulinic acid dehydratase gene transfer and expression in
         Corynebacterium glutamicum for L-lysine production
      FARWICK M; HUTHMACHER K; SCHISCHKA N; MARX A; PFEFFERLE W
ΑU
PA
      DEGUSSA AG
      DE 10145585 2 May 2002
PΙ
      DE 2000-1045585 28 Oct 2000
ΑI
      DE 2000-1053708 28 oct 2000
PRAI
DT
      Patent
      German
LA
      WPI: 2002-445647 [48]
os
L11
      ANSWER 16 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2002-15600 BIOTECHDS
AN
      New tmk gene of Coryneform bacteria, useful when suppressed, for
TI
      increasing fermentative production of L-amino acids, encodes a
      thymidylate kinase;
          _-lysine production by recombinant Corynebacterium glutamicum useful
         for food, medicine and pharmaceutical industry
      FARWICK M; HUTHMACHER K; MARX A; PFEFFERLE W
DEGUSSA AG
PA
PI
      DE 10140095 28 Mar 2002
ΑI
      DE 2000-1040095 19 Sep 2000
PRAI
      DE 2000-1046235 19 Sep 2000
DT
      Patent
      German
IA
      WPI: 2002-341601 [38]
os
L11
      ANSWER 17 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2002-16465 BIOTECHDS
AN
      New cysD, N, K, E and H genes from coryneform bacteria, useful, when over
TI
      expressed, for increasing fermentative production of L-amino acids;
         vector plasmid pEC-XK99E-mediated recombinant protein gene transfer
         and expression in Escherichia coli for use in L-amino acid preparation
         and medicine, pharmaceutical and food industries
      FARWICK M; HUTHMACHER K; PFEFFERLE W; SCHISCHKA N; BATHE B
ΑU
      DEGUSSA AG
PΑ
      DE 10136986 21 Mar 2002
PΙ
         2000-1036986 3 Sep 2000
ΑI
      DE
      DE 2001-1009691 28 Feb 2001
PRAI
DT
      Patent
ΙΔ
      German
      WPI: 2002-373165 [41]
os.
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L11
       ANSWER 18 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
AN
       2002-16464 BIOTECHDS
      RodA genes from coryneform bacteria, useful, when overexpressed, for increasing fermentative production of L-amino acid, especially L-lysine;
ΤI
          vector plasmid pEC-XK99E-mediated recombinant protein gene transfer
          and expression in Escherichia coli for use in L-amino acid preparation
          and medicine, pharmaceutical and food industries
       FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W
ΑU
PA
      DEGUSSA AG
      DE 10132947 21 Mar 2002
PΙ
      DE 2000-1032947 12 Sep 2000
ΑI
PRAI
      DE 2000-1044943 12 Sep 2000
DT
       Patent
       German
LA
os
      WPI: 2002-373156 [41]
      ANSWER 19 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
       2002-16463 BIOTECHDS
AN
ΤI
      New ftsx gene from coryneform bacteria, useful, when over expressed, for
       increasing fermentative production of L-amino acid, especially L-lysine;
          vector plasmid pEC-XK99E-mediated recombinant protein gene transfer
          and expression in Escherichia coli for use in L-amino acid
      preparation, medicine, pharmaceutical and food industries FARWICK M; HUTHMACHER K; BREHME J; RIEPING M; PFEFFERLE W
ΑU
PA
       DEGUSSA AG
PΙ
       DE 10132176 21 Mar 2002
          2000-1032176 12 Sep 2000
AΙ
      DE 2000-1044944 12 Sep 2000
PRAT
DT
       Patent
      German
1 A
      WPI: 2002-373154 [41]
os
       ANSWER 20 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
ΑN
       2003-07731 BIOTECHDS
      New metD gene of coryneform bacteria, useful when suppressed, for increasing fermentative production of L-amino acids, e.g. for animal
TI
       nutrition;
          Corynebacterium glutamicum fermentation for methionine and lysine
          production
       REY D; RUECKERT C; BATHE B; HUTHMACHER K; PFEFFERLE W; PUEHLER A;
ΑU
       KALINOWSKI J
PA
       DEGUSSA AG
       DE 10126164 5 Dec 2002
PΙ
       DE 2001-1026164 30 May 2001
ΑI
      DE 2001-1026164 30 May 2001; DE 2001-1026164 30 May 2001
PRAI
DT
       Patent
       German
IΑ
      WPI: 2003-141912 [14]
os
=> d 21-30
      ANSWER 21 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
       2002-18760 BIOTECHDS
AN
      New polynucleotide representing mtrA and B genes of coryneform bacteria,
TI
       useful, when suppressed, for increasing fermentative production of amino
          vector-mediated recombinant protein gene transfer and expression in host cell and fermentation for use in medicine, pharmaceutical and food industry, as feedstuff, DNA primer, DNA probe, DNA microarray and
          DNA chip
       DEGUSSA AG; FORSCHUNGSZENTRUM JUELICH GMBH
РΔ
       DE 10125089 23 May 2002
PΙ
       DE 2000-1025089 22 Nov 2000
ΑI
PRAI
      DE 2000-1057802 22 Nov 2000
DT
       Patent
       German
LA
       WPI: 2002-510237 [55]
os
       ANSWER 22 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
111
       2002-14941 BIOTECHDS
ΑN
       New dep34 gene from coryneform bacteria, useful, when inactivated, for
TI
       increasing fermentative production of L-amino acid, especially L-lysine;
          plasmid-mediated inactivated mutant gene transfer and expression in
          Corynebacterium glutamicum for use in food and pharmaceutical industry
ΑU
       FARWICK M: HUTHMACHER K; HERMANN T; BATHE B; PFEFFERLE W
```

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PA
      DEGUSSA AG
PΙ
      DE 10112429 21 Mar 2002
ΑI
         2000-1012429 9 Sep 2000
      DE 2000-1044708 9 Sep 2000
PRAI
DT
      Patent
LA
      German
      WPI: 2002-316816 [36]
os
L11
      ANSWER 23 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ΑN
      2002-15772 BIOTECHDS
      New menE gene of coryneform bacteria, useful when suppressed for increasing fermentative production of L-amino acids, encodes an
TT
      O-succinylbenzoic acid CoA-ligase;
         vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation
ΑU
      FARWICK M; HUTHMACHER K; PFEFFERLE W; MARX A
      DEGUSSA AG
PA
PΙ
      DE 10112106 28 Mar 2002
ΑI
      DE 2000-1012106 20 Sep 2000
PRAI
      DE 2000-1046624 20 Sep 2000
DT
      Patent
LA
      German
      WPI: 2002-331278 [37]
os
      ANSWER 24 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
ı 11
ΑN
      2003-01018 BIOTECHDS
      New trehalose-6-phosphate synthase gene from coryneform bacteria, useful,
ΤI
      when suppressed for increasing fermentative production of amino acids,
      especially lysine;
         vector-mediated gene transfer and expression in host cell for strain
         improvement and amino acid preparation
      HERMANN T; WOLF A; MORBACH S; KRAEMER R
ΑU
PA
      DEGUSSA AG
      DE 10110760 1 Aug 2002
DE 2001-1010760 7 Mar 2001
PΙ
ΑI
      DE 2001-1003873 30 Jan 2001; DE 2001-1003873 30 Jan 2001
PRAI
DT
      Patent
      German
LA
os
      WPI: 2002-600944 [65]
      ANSWER 25 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
AN
      2002-15771 BIOTECHDS
      New pepC gene of Coryneform bacteria, useful when suppressed, for
TI
      increasing fermentative production of L-amino acids, encodes an
      aminopeptidase I;
         vector-mediated gene transfer and expression in host cell for strain
         improvement and L-lysine preparation
      FARWICK M; HUTHMACHER K; BATHE B; RIEPING M; PFEFFERLE W
ΑU
PA
      DEGUSSA AG
      DE 10108828 28 Mar 2002
PΙ
      DE 2000-1008828 19 Sep 2000
ΑI
PRAT
      DE 2000-1046229 19 Sep 2000
DT
      Patent
LA
      German
os
      WPI: 2002-331276 [37]
      ANSWER 26 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
ΑN
      2002-18235 BIOTECHDS
      New polynucleotide encoding the CysQ transporter of coryneform bacteria,
TI
      useful, when over expressed, for increasing fermentative production of
         vector-mediated recombinant protein gene transfer and expression in
         host cell and fermentation for use in L-amino acid preparation
      FARWICK M; HUTHMACHER K; BATHE B; PFEFFERLE W
ΑU
      DEGUSSA AG
PA
      DE 10057801 23 May 2002
PΙ
      DE 2000-1057801 22 Nov 2000
ΑI
      DE 2000-1057801 22 Nov 2000
PRAI
      Patent
DT
      German
ΙΔ
os
      WPI: 2002-509931 [55]
      ANSWER 27 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
L11
      2002-15769 BIOTECHDS
AN
      New dps gene of coryneform bacteria, useful when overexpressed, for
TT
      increasing fermentative production of L-amino acids, encodes a
```

```
DNA-protection protein;
         vector-mediated gene transfer and expression in host cell for strain improvement and L-lysine preparation
      BATHE B; KREUTZER C; RIEPING M; MARX A; FARWICK M; PFEFFERLE W
ΑU
      DEGUSSA AG
PΑ
      DE 10046623 28 Mar 2002
PΙ
      DE 2000-1046623 20 Sep 2000
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      DE 2000-1046623 20 Sep 2000
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      Patent
LA
      German
      WPI: 2002-331127 [37]
os
L11
      ANSWER 28 OF 44 BIOTECHDS COPYRIGHT 2004 THOMSON DERWENT/ISI on STN
      2002-15768 BIOTECHDS
AN
TT
      New polynucleotide from coryneform bacteria, useful when overexpressed
      for increasing fermentative amino acid production, encodes sigma factor
         vector-mediated gene transfer and expression in host cell for strain
         improvement and L-lysine preparation
      BATHE B; KREUTZER C; MARTENS M; FARWICK M; HERRMANN T; PFEFFERLE W
PA
      DEGUSSA AG
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      DE 10043331 14 Mar 2002
      DE 2000-1043331 2 Sep 2000
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      DE 2000-1043331 2 Sep 2000
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DT
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OS
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      DE 2000-1042742 31 Aug 2000
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      DE 2000-1042742 31 Aug 2000
PRAI
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     Effect of pyruvate carboxylase overexpression on the physiology of
     Corynebacterium glutamicum.
     Koffas Mattheos A G; Jung Gyoo Yeol; Aon Juan C; Stephanopoulos Gregory
     Department of Chemical Engineering, Massachusetts Institute of Technology,
     Cambridge, Massachusetts Ö2139, UŠÁ.
Applied and environmental microbiology, (2002 Nov) 68 (11) 5422-8.
     Journal code: 7605801. ISSN: 0099-2240.
     United States
     Journal; Article; (JOURNAL ARTICLE)
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ΑU

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     2001197891 A JP 2000-363631 20001129; ZA 200007083 A ZA 2000-7083 20001130; CN 1304999 A CN 2000-134608 20001201; KR 2001062075 A KR 2000-72550 20001201; US 2002002275 A1 US 2000-725178 20001129; SK
     2000001795 A3 SK 2000-1795 20001127; HU 2000004782 A1 HU 2000-4782
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        2002040129 A1 20020404
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```

```
DE 19958159 A1 DE 1999-19958159 19991202; AU 2000071988 A AU 2000-71988
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      SK 2000001794 A3 SK 2000-1794 20001127; CN 1305000 A CN 2000-134610 20001201; KR 2001062078 A KR 2000-72627 20001202; US 2002040129 A1 US
       2000-725898 20001130; US 2003022320 A1 Div ex US 2000-725898 20001130, US
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       IZUI, K; MATSUI, H; SUGIMOTO, M; SUZUKI, T; HIROSHI, M; MASAKAZU, S;
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       WO 1994-JP1365 19940817, RU 1996-107112 19940817; MX 195842 B MX 1994-6418
      19940823; HU 219600 B WO 1994-JP1365 19940817, HU 1996-240 19940817; CZ 289051 B6 WO 1994-JP1365 19940817, CZ 1996-524 19940817; EP 723011 B1 EP 1994-924384 19940817, WO 1994-JP1365 19940817; DE 69430919 E DE 1994-630919 19940817, EP 1994-924384 19940817, WO 1994-JP1365 19940817; KR
       337959 В WO 1994-JP1365 19940817, KR 1996-700741 19960214; SK 283369 В6 WO 1994-JP1365 19940817, SK 1996-204 19940817; PH 1199448842 В1 РН 1994-48842
```

```
19940823
           AU 9480991 A Based on WO 9506114; EP 723011 A1 Based on WO 9506114; BR 9407625 A Based on WO 9506114; AU 682547 B Previous Publ. AU 9480991, Based on WO 9506114; US 5876983 A Based on WO 9506114; JP 3013711 B2 Previous Publ. JP 07111890; RU 2133772 C1 Based on WO 9506114; HU 219600 B
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           69430919 E Based on EP 723011, Based on WO 9506114; KR 337959 B Previous
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           Potentiation of benzoate toxicity by glyoxylate. Inhibition of pyruvate
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           carboxylase and the urea cycle.
           Cyr D M; Tremblay G C
ΑU
           Department of Biochemistry and Biophysics, University of Rhode Island,
CS
           Kingston 02881.
           DK33536 (NIDDK)
NC.
           Biochemical pharmacology, (1989 Sep 1) 38 (17) 2919-23.
S0
           Journal code: 0101032. ISSN: 0006-2952.
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           Regulation of reductive production of succinate under anaerobic conditions
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           in baker's yeast.
           Muratsubaki H
           Department of Clinical Biochemistry, Faculty of Health Science, Kyorin
CS
           University, Tokyo.
Journal of biochemistry, (1987 Oct) 102 (4) 705-14.
SO
           Journal code: 0376600. ISSN: 0021-924X.
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           Pyruvate carboxylase from Saccharomyces cerevisiae. Quaternary structure,
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           effects of allosteric ligands and binding of avidin.
           Rohde M; Lim F; Wallace J C
ΑIJ
           European journal of biochemistry / FEBS, (1986 Apr 1) 156 (1) 15-22.
S0
```

```
Journal code: 0107600. ISSN: 0014-2956.
     GERMANY, WEST: Germany, Federal Republic of Journal; Article; (JOURNAL ARTICLE)
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FS
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     The sub-cellular localisation and regulatory properties of pyruvate
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     carboxylase from Rhizopus arrhizus.
     Osmani S A; Scrutton M C
     European journal of biochemistry / FEBS, (1985 Feb 15) 147 (1) 119-28.
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     Journal code: 0107600. ISSN: 0014-2956.
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     EFFECT OF SALT STRESS ON THE STRUCTURE AND CARBON FLOW MECHANISM IN A
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     NOXIOUS WEED PARTHENIUM-HYSTEROPHORUS.
     HEGDE B A [Reprint author]; PATIL T M
     DEP BOTANY, SHIVAJI UNIV, KOLHAPUR 416004, INDIA
CS
     Weed Research, (1982) Vol. 22, No. 1, pp. 51-56. CODEN: WEREAT. ISSN: 0043-1737.
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     Pyruvate Carboxylase From Aspergillus nidulans Regulatory Properties.
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     Osmani, S.A.; Marston, F.A.O.; Selmes, P.; Chapman, A.G.; Scrutton, M.C.
ΑU
     Dept. Biochem., Univ. London King's Coll., London, UK
CS
     Eur. J. BIOCHEM., (1981) vol. 11\overline{8}, no. 2, pp. 271-278.
SO
     Journal
DT
FS
     L; K
LA
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SL
=> d 41-44
L11
     ANSWER 41 OF 44 BIOSIS COPYRIGHT 2004 BIOLOGICAL ABSTRACTS INC. on STN
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     PREV197866005045; BA66:5045
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     PYRUVATE CARBOXYLASE FROM A THERMOPHILIC BACILLUS STUDIES ON THE
     SPECIFICITY OF ACTIVATION BY ACYL DERIVATIVES OF COENZYME A AND ON THE
     PROPERTIES OF CATALYSIS IN THE ABSENCE OF ACTIVATOR.
     LIBOR S M [Reprint author]; SUNDARAM T K; SCRUTTON M C
     DEP BIOCHEM, UNIV MANCH INST SCI TECHNOL, MANCHESTER M60 1 QD, ENGL, UK Biochemical Journal, (1978) Vol. 169, No. 3, pp. 543-558.
CS
SO
     ISSN: 0264-6021.
DT
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FS
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LA
     ANSWER 42 OF 44 HCAPLUS COPYRIGHT 2004 ACS on STN
111
     1970:494890 HCAPLUS
AN
     73:94890
DN
     Metabolism of microorganisms important in food technology. IX.
TI
     carboxylase in Penicillium caemberti var candidum. 2. Kinetic properties
     of the enzyme
     Schormueller, Josef; Stan, Hans J.
ΑU
     Inst. Lebensmittelchem. Lebensmitteltechnol., Tech. Univ. Berlin, Berlin,
CS
```

```
Fed. Rep. Ger.
     Zeitschrift fuer Lebensmittel-Untersuchung und -Forschung (1970), 142(4),
S0
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     CODEN: ZLUFAR; ISSN: 0044-3026
ĎΤ
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Ľ11
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                             and oxaloacetate.
     Palacian E; de Torrontegui G; Losada M
Biochemical and biophysical research communications, (1966 Sep 8) 22 (5)
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     Journal code: 0372516. ISSN: 0006-291X.
     United States
CY
     Journal; Article; (JOURNAL ARTICLE)
DT
     English
LA
     Priority Journals
FS
     196709
EΜ
ED
     Entered STN: 19900101
     Last Updated on STN: 19970203
     Entered Medline: 19670907
     ANSWER 44 OF 44 HCAPLUS COPYRIGHT 2004 ACS on STN
L11
     1966:484246 HCAPLUS
ΑN
     65:84246
DN
OREF 65:15824f-q
                                                              ***carboxvlase***
        ***Inhibition***
                             of yeast
                                         ***pyruvate***
                                                                                    by
ΤI
      l- ***aspartate***
                             and oxaloacetate
      Palacian, E.; de Torrontegui, G.; Losada, M.
ΑU
      Inst. Biol. Celular, Madrid
CS
     Biochemical and Biophysical Research Communications (1966), 24(5), 644-9
50
     CODEN: BBRCA9; ISSN: 0006-291X
DT
      Journal
     English
LA
=> dis his
      (FILE 'HOME' ENTERED AT 11:49:36 ON 05 APR 2004)
     FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 11:49:49 ON 05 APR 2004
            7857 S HANKE, ?/AU
L1
                3 S L1 AND PYRUVATE CARBOXYLASE
L2
            1 DUP REM L2 (2 DUPLICATES REMOVED)
9293 S PYRUVATE CARBOXYLASE
L3
L4
             790 S L4 (5A) (SEQUENCE OR GENE)
L5
              49 S L5 (5A) MUTA?
L6
             530 S L4 (5A) (FEEDBACK OR RESISTANT OR INHIBIT?)
L7
              94 S L7 (5A) (ASPART?)
L8
               3 S L6 AND L8
L9
L10
               1 DUP REM L9 (2 DUPLICATES REMOVED)
              44 DUP REM L8 (50 DUPLICATES REMOVED)
L11
=> log h
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COST IN U.S. DOLLARS
                                                                        TOTAL
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FULL ESTIMATED COST
 SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:03:03 ON 05 APR 2004
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